

1600

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/605,042A

DATE: 11/12/2001

TIME: 15:40:48

Input Set : A:\es.txt

Output Set: N:\CRF3\11122001\I605042A.raw

ENTERED

3 <110> APPLICANT: WU, Xue-Ru
 4 SUN, Tung-Tien
 6 <120> TITLE OF INVENTION: TRANSGENIC ANIMALS AS URINARY BIOREACTORS FOR THE PRODUCTION

OF

7 POLYPEPTIDE IN THE URINE, RECOMBINANT DNA CONSTRUCT FOR KIDNEY-SPECIFIC
 8 EXPRESSION, AND METHOD OF USING SAME

10 <130> FILE REFERENCE: WU43C

12 <140> CURRENT APPLICATION NUMBER: 09/605,042A

13 <141> CURRENT FILING DATE: 2000-06-26

15 <150> PRIOR APPLICATION NUMBER: 60/108,195

16 <151> PRIOR FILING DATE: 1998-11-13

18 <150> PRIOR APPLICATION NUMBER: 60/142,925

19 <151> PRIOR FILING DATE: 1999-07-09

21 <150> PRIOR APPLICATION NUMBER: 09/438,785

22 <151> PRIOR FILING DATE: 1999-11-12

24 <160> NUMBER OF SEQ ID NOS: 54

26 <170> SOFTWARE: PatentIn version 3.1

28 <210> SEQ ID NO: 1

29 <211> LENGTH: 9345

30 <212> TYPE: DNA

31 <213> ORGANISM: Mouse Uromodulin

33 <220> FEATURE:

34 <221> NAME/KEY: misc_feature

35 <222> LOCATION: (1832)..(1832)

36 <223> OTHER INFORMATION: n is unknown.

39 <220> FEATURE:

40 <221> NAME/KEY: misc_feature

41 <222> LOCATION: (7777)..(7777)

42 <223> OTHER INFORMATION: n is unknown.

45 <400> SEQUENCE: 1

46	ggggggggccc	tggggagttt	ggctaagtct	tgcaaatgag	ctgtgatgac	aggtttgccg	60
48	catatgagat	ccagtgcaca	gtcatctct	agatgtctgc	ataccaataa	gtgacccatc	120
50	attatgcaat	caggccggac	tcatcctctg	tggctttgtc	tcttactact	gtaaacttga	180
52	taacctatat	gattttaccc	atttcccctc	catggcactc	aactctcctc	ttcctatgtg	240
54	accctactta	tgtcctatgt	gactccagct	gcttcctttg	atgagagcca	tcctgttctt	300
56	tctatgtgac	tctgtctact	tcttccacgt	gactccacca	atctgtctac	attgcagagt	360
58	cactcacagt	ttcttgagag	cagaagactc	agaactgatc	tgtcctcaat	gtcctcccta	420
60	cactttctcc	tcataatcca	catatctaaa	gctatagaga	taatttcatg	cactatagct	480
62	ttcagtacta	tcgtatctac	tgtctctacc	ctgtaactgg	tatcttcatg	acatctcgaa	540
64	tatttccaat	ttctctattg	ctgcaaagtc	ttgagaagtc	tagtcttatg	gatctccttt	600
66	tctcctcagg	tctcctgggc	tcacacaccc	attcacactt	cttgaatatt	ctttgaacat	660
68	aacaaattct	ctccatgggt	ttgttccctc	tacccaaatt	catgccttca	ggatacttac	720
70	tctgccccat	cttcaactcat	ctctgctttg	gtcattcaaa	tctcaaatgt	agccatttct	780
72	aaaaggctct	ccaagagaat	aatatittgaa	agcattttgc	tattctatca	agtgatcata	840
74	caatgtctgc	tcctgtccacc	accatgacca	tccccatgaa	tacagacact	gccttcttag	900
76	tgtttgtctg	atgtgttctg	tgtggtacct	tgtagataaa	tgtgtgaata	aacatctgtg	960
78	gagcaaattg	aatcatcaga	tagcaccttc	tctctgagag	gcatgatctc	atgggttatcc	1020
80	ccaaagcatg	aggtaaggac	attatcccag	gtccatgctg	gtttccgtat	tgattgtttc	1080

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/605,042A

DATE: 11/12/2001

TIME: 15:40:48

Input Set : A:\es.txt

Output Set : N:\CRF3\11122001\I605042A.raw

RECEIVED
DEC 07 2001
TECH CENTER 1600/2900

82 taacacaaac ttaatagatt aaaacagcac ggatttattc tcacatgttt tgagacgcca 1140
84 gaaatctgac accagtttca atgttttagac ttgatgcaca cctgtaattc tggacttag 1200
86 gaggcagatg cagggggact atgatttaaa gccattttt aagctgctgg gtgagaacct 1260
88 gtcttgattt ttttttcaca ttgggctaaa agtcaaggat catcagggtt ggtgcattct 1320
90 ggaagaaacc tttgccttgc agcttcccag agggccgcca gcattccttg gcttgtgttt 1380
92 ggtcctggaa tcaactgtgac cttatgctcc atcctcacat tccctctgca tttatcctct 1440
94 aagcacoggt gtgcttgtat ccaaccttta ggagcccat agatcccca tttctcctcg 1500
96 acttaatcac acctgtataa gtacttttca ctctgcaaag caatatttgt gggccaagg 1560
98 gattaggatg tgggtatatt tgtgggtgt cattattcaa tgcttcatat ttacactgtt 1620
100 tctctgtttc actttatttg ggtacttgaa cttctaagaa gaactgaggg gtattgttgt 1680
102 aggaactaaa tcccccatg gacctctgtg ctttccacct atcacacaag acagagggta 1740
104 tttgtatttt tagatcccca gaagaaattc ccactctcaa cctccatcc ctgacttget 1800
106 **cacatctaga tgaagcaggg aacagcctga gncctggaac tcaactggagc cagatgactc 1860**
108 tatggagtta ggttttagta ttcaagacac gatgcaagac tcacctgect tccccacaca 1920
110 gacatgtggc tgctgttcaa aggtggggcc atggggctgc tgagactaag tcacgtggac 1980
112 agcgcocatg acaagcagtg acatggagac caaggctgca gtgtgcatgc tccacagggtg 2040
114 cacctgaagc ctacagagac ggaagaggag agggagcaga aagatgggggt acagataccc 2100
116 ctctgttagg aagggcttca aaaccgtctt ctaagtttt gatcctttta aatgtatcca 2160
118 cctgtcactt gacctctctc tgctctgtct gatcagcttc tcaaaaccct tcatccccct 2220
120 aactccaccc tactgaaaaa agatgaaacc acttgtcaat ataaacctca acagctaagc 2280
122 atggaatact gttaaccctt caagacataa agctgactga agggataagt ttgaaaaaaa 2340
124 tgggcttcag tttgcactag ctaagtatgt aaccttgaag atattactca gtttctctga 2400
126 acttcagttc gctctcttat ttattgacaa catgtaagag cacataccgg gcatttcttg 2460
128 tcaccaaattg aagtttccag taccaggaat gggttatatc taatcgagtt gttggccaaa 2520
130 ggagttccat ggaaactccc aaacaatcca ggctattggc aagacttttg atgtctctcc 2580
132 acaaactgac agcaactggt gaaagacaat acctacacag ctactgaac acagagaagc 2640
134 tgagttggtg cctacataaa tctcttagct ctatgaaggt ccataatggt attcatggcc 2700
136 ctagaagata ctcttccctc caccaaagga gaaatgtaaa cactaagcca gccataaacc 2760
138 ctttggctctg ttagagtggc ctgctgcaag gttctgctgg tgtaataatg gcacagagct 2820
140 tgtaggagta accaaacaat atctgatagg ttaaggccca ctccatgaga tcaaaccag 2880
142 acctaaacac acttgggttg atgagaacct gagaccgat aggccaggga cctatgggaa 2940
144 aactaaacat gactgttctg ctaaaagaac ctaccaataa aatagctcct agtgacattc 3000
146 tgccatattt atagatcagt tcttgttca tccatcatca gaaaacttcc tcttcagtag 3060
148 atagaaacaa atatagagcc cacagccaga taatatccag agagtgaat accctggaac 3120
150 actcagctct aaaagggatg tctccatcaa ccccccccc cccaccttt caggactcat 3180
152 gaaaccttcc agaagacgag tcagaaagag tgtaagatcc agaagggatg gaggacatcc 3240
154 aaaacttaag gccttcaaga cacaactgta agggaaacaca tatgaactta gagagatggt 3300
156 gcagcatgca cagagcctgc atgggcttgt accagatggg gttctagagc tgaaaggaga 3360
158 aatggatagc cactctgatt cctaaccag aagtgacccc taactgatag tgacttgcaa 3420
160 ataaaaaatt agtctttttt caaagggagt ctactggga aaataaacca ctctaaatag 3480
162 tagaccccat gccagcagt agatggccaa cagaaaatga actcaatgtc atctttgacc 3540
164 ttcctttgtc ggaaagcttt ttgtttgctt tttcttacc tacaggtcct ttgcatattt 3600
166 attatggttt cttgtttcag gtttttaatg gaactcctga gtgtgtgaat gtgtgtgtct 3660
168 ctgcatacat gtgtgtttct taagcccgtt ctttttcttt tcttctcttt attgtttaaa 3720
170 aaaacaattg ttctttattt tattattatt ccttatttta gacagaaaca ttgtggatcc 3780
172 agatgggaga agaggttgga ggaattgga ggagtaaagg gacagaaacc ataatcaggg 3840
174 ggaaccataa tcaggagaa ccataatcag gggagccat aatcaggggg agccataatc 3900
176 caagggaacc ataatcagaa tatactgtat gaaaaaatt ctattttcaa taaaaaaga 3960
178 ataaaaaaaa aacagtctga ctgaagaata gcacttgga agtaactctt gttataacaa 4020

RAW SEQUENCE LISTING

DATE: 11/12/2001

PATENT APPLICATION: US/09/605,042A

TIME: 15:40:48

Input Set : A:\es.txt

Output Set: N:\CRF3\11122001\I605042A.raw

180	tccatatcaa	atgccctgcc	tgtgttagca	agttaagaga	aaagattatt	ccaagagatc	4080
182	caagtctcct	tcaaaaccaa	gtgtgtacag	aacattgtct	gaggagtaag	attgcatttg	4140
184	gcaacatgca	tgtctttaat	ggtgtggaga	atttcagtg	agttggcacg	tcagaaagca	4200
186	caactggtgaa	aaatggagag	aatagatata	tcctttgaga	aatttgggtct	caaaaagtag	4260
188	ggtatcaaat	tacttggtgt	ctgtgagatc	aattggttgt	ctctgtaggt	tagcttacat	4320
190	aggagacagg	aataagttaa	ggagagaagg	gaggacattg	gagcacccaa	ggagagaggg	4380
192	accttcctcc	taaaagttaa	tgaggtggcc	ttcattccaa	ggagaagaga	ttcaggtcgc	4440
194	ccgggaagat	gagggaccaa	catccacaag	gaatggcagg	aagtcaccc	gtgtgcataa	4500
196	atggagagag	ggggtcaaa	atggagcaaa	gaaggatgag	caagaaaatg	gtggatgtgg	4560
198	atactctgag	gatggcctgg	ctgtggtgag	caaatgtgg	gcaaagtggc	actccatgaa	4620
200	caagacagct	tgtctgttt	gcagatccct	aaataaaggc	acatggcatg	ccatggaggc	4680
202	taggggagtg	gaggggaaag	gtatatagat	agatgcagaa	gtaccagagg	agccaggaag	4740
204	gacaggagta	ggagggacag	gtttgcacaa	ggctttgtcc	tctccccacc	agctctctct	4800
206	cccttctgta	tatgcacata	cacagtgagc	tagtgtgcac	atgtgtgcac	atatgcattg	4860
208	gatgaacaga	ggccagtctt	gggtgtcagt	cttcaggccc	tatctacctt	gtttttgaga	4920
210	caatctcact	tgagttagtt	gagtgcactct	cctagtattc	tacagagggt	tcctcagggtg	4980
212	gggaggaatg	ggtgggagaa	gcaaatttaa	gactggttga	tttcttgaat	ttcagtgggc	5040
214	ttgggaaata	gcagctatat	attcagtttc	ctcgttccctg	gctggcttcc	tggggtgac	5100
216	agagcagagt	atagtagccc	tgtgtggcag	tcacaccaag	cagacagaag	atagggcatg	5160
218	gctctggtgt	ggctggtaga	cataggaaag	gatccttgta	gcaagatgtt	tgccatctcc	5220
220	agagacttag	acagcccagg	aaagtttgtc	ctcccaggac	cagccagcac	tgagactgga	5280
222	atgcatcaaa	tccagagacc	agaaagcacg	gtgctagcac	ttaggaagag	acactagccc	5340
224	aaagtctcct	tgtcctgccc	taaagctttg	ccaattctgc	aaaccttgaa	aaattagcat	5400
226	cttttaaattc	agaagggata	caagaagaga	acttacatgg	gaccttgtaa	aaaagcatag	5460
228	ggcatcagta	actaaagtta	caaagataac	aatcagtggt	gagtgaacaa	aggacatggc	5520
230	catgtttttt	ttgttatgaa	acacacgcac	aggcacaggc	actcacgtgt	gcgcacgcgc	5580
232	gcacacacac	acacgcgcac	acacacacac	acgcacgcac	acatgcacca	cacacaaact	5640
234	gcaaaagtga	ataaaaagat	atttctcact	ttggcaaagt	ggatggaaaag	ttgatcaaaa	5700
236	tgaaagttat	actcagaact	attttgtact	agagggaggt	tataaattat	tgttattgtt	5760
238	atattctatt	ttactgtttg	tggcagccct	agttgggtctt	gaactcacta	tgaagctagc	5820
240	aatgaccttg	agcttctgat	ccttatatct	acactctcaa	gtgccagat	tataagtgtg	5880
242	caccactata	ctcagtttat	gctgtgctaa	ggactaagcc	caattataca	aacacacaca	5940
244	catatataca	cacatacaca	cacacacaca	cgtatatata	tgtatatata	tatacatata	6000
246	tacacacaca	cacacacata	tatgtaaaat	ttgggaagat	atatcaatct	tctttaaagt	6060
248	acatgctact	ttggtccaaa	actttcactt	ttaggaagtt	aagaagggaag	agacagaata	6120
250	agagatgtcc	caagaaagtc	agtgtggttg	tcttagttat	gcttctgct	cagtcaatgt	6180
252	ttcagatttt	tctcagcaca	atgacatcta	ttctatcaag	tttttgataa	ctctttacat	6240
254	gggactgggt	gtggcttggt	gctctagcta	tttctatttg	tgactgccta	tcagcaaagc	6300
256	atccacttca	gactttgact	caaacatcac	caagtattcc	cacttgcat	gtctctgtta	6360
258	accagcatca	ctgttcacag	ggcagggcag	cacatctcac	aaagggaaaag	ggaaagggaa	6420
260	gagttaaatt	ccctgggata	ctagtccagg	tggactcagg	caaacagcct	cttcaattgt	6480
262	aagatgattc	cctagtccaa	ggaccctcta	ctgtttggac	tccagtcttg	tctgacagag	6540
264	gtccagtcca	ggagtgtcca	gatggtctga	taacctgatg	ccattctcag	agactctttc	6600
266	ctgtctggaa	tctagttagg	aggacttatc	tgggtgaagct	gtcctttaga	acaggagtgt	6660
268	gttcaggtct	tcaaagcaaa	cattcccttt	atcctaacac	agtctgactt	cagatatact	6720
270	gtctttttcc	tggtcccttg	ggcttaggtc	taccttgctc	ttgccagggt	ccaagaaaag	6780
272	gcccagaacc	ttggcactgt	tttgccagtt	aatgtctaac	tgaggaaatgt	cttgctgcca	6840
274	aaaggtgaaa	acagagacct	tgtattttcca	ggcacagggt	tgaccccaat	gtcaatcatt	6900
276	ttgtgtctaa	ctcccagggg	aaaaactaac	aacaacagac	tcatggcttg	gaaaaggtga	6960

RAW SEQUENCE LISTING

DATE: 11/12/2001

PATENT APPLICATION: US/09/605,042A

TIME: 15:40:48

Input Set : A:\es.txt

Output Set: N:\CRF3\11122001\I605042A.raw

```

278 attctatgcc aaaaggaag gaaagttcta cccccacaga aacaatctca gagggcagaa 7020
280 gcagagaata atctgagga gagggccagc caagggcagg caagtatata ttgatcacag 7080
282 gcaattactt gtgaatggac cagtcctgtc ctgggttcag gtaaggctgt atgaaactgt 7140
284 ccccccata tccacttctc ctctatctaa tcccattata tttcaggag gttgtggtag 7200
286 aagcttagct tctggacact ggggtcccat gctaaccctc atggcatcct ggtatgctgc 7260
288 tgtaaaacct agggtaattgc ttgcatccat ctggaattat ttcacctgtt gcaaccacaa 7320
290 tcattttgaa aatactagta tgtattatag ttatgtatgt atatagagtt aatcatctct 7380
292 aaagctcctt atcttttgcc atttctttac atgagttgta tgaagatgta gacgatattc 7440
294 attattctct ttggtatcta gcacctgtt tggcacataa tactactcaa taagggtttg 7500
296 ttgaatgaat aagtaggtga gagcaaattg taagttcagg taatcacgaa ctctctgtaa 7560
298 aactccaagg ctgcctccag taaggataaa gtctgtagt agcctttccc catcttgcaa 7620
300 ctttttgctc caaatgaaag actcagttct tcaaaatgtg cagcacatgg aggtttgcga 7680
302 cataggggtg tttcacaga ggcttcggaa gccaccgaa cctacagtta gatcactgta 7740
304 cataggggtg cagtccttct tttacatata agctgtgcct cctgggttct atccatgctg ttttctgctc 7800
306 catatagagg gtacacaaca aaagcatttc ttctgtctat agggaagcaa attagatcat 7860
308 gcatgtgcct caccacctc tgttctcatg atttcaggca tcagaaacac aagggaatc 7920
310 caaagtacct aaccatcct tgcctttggg caggtgtttc caggacagag ggcagagtgt 7980
312 aaaggatggg gatccctttg acctggatgc tgcgtgtaat gatggtaacc tcctggttca 8040
314 ctctggctga agccagtaac tcaacagaag cgagtaagtg tgtgtgtgtg tgtgtgtgtg 8100
316 tgtgtgtgtg tgtgtagaga aatgttcctt ttgcagaagc aatcttaatc cctcttttag 8160
318 cacacttgat gtgatcttta ttttaagccc atttctcaga ttgtaatgag cacaggactc 8220
320 acttcgaagt tttgttaaga tgcaaattct acttttagtag gtctagcaag gggcccagaa 8280
322 ctctgaatta atagcagcgt gtgggtgatg tttctggtgg gacaagggc taaaacacct 8340
324 ctgaaccatt tctgcacttc acggtaaagt cacaagcatg cccagataca taagagattt 8400
326 gaccacctc tctgttaagt gtgaagtcac cccatggggg tagctttgcc ttccaccctg 8460
328 gagtactctg gaattacact aagtataatt gtgaggtcat ggttaaaagc acatgttctg 8520
330 tggtcaggcc atgtgcgtgt accctgtttg acaactggct tgctcgttct gaatgtcaat 8580
332 attcttttct gtaaataag aaaatgaaa tggtttccag cggcagggg tgtgccctgg 8640
334 ggaggattcg ctaaactcta gactgaaaag tcaatgaata gaggactcca ctcaggggag 8700
336 ctcggtggg tgtgttttga aggtgccaac aacttaacaa gtccagaaaa gcaagaaagt 8760
338 atgggcagg gcacctgcca gctgcaggga ttctgaagct gggctcttct gtccgcagga 8820
340 cgggtgtctg aatgccacaa ccacgccacc tgcacggtgg atggtgtggt cacaacgtgc 8880
342 tctgcacaga ccggcttcac tgggtgatgg ctggtgtgtg aggacatgga tgagtgtgct 8940
344 accccatgga ctcacaactg ctccaacagc agctgtgtga acacccggg ctggtttaag 9000
346 tgctcctgtc aggatggttt tgcgtgacg cctgagctga gctgcaactg tgtggatgag 9060
348 tgctcagagc aggggtcag taactgtcat gccctggcca cctgtgtcaa cacagaaggc 9120
350 gactacttgt gcgtgtgtcc cgagggcttt acaggggatg gttggtactg tgagtgtctc 9180
352 ccaggctcct gtgagccagg actggactgc ttgccccagg gcccgatgg aaagctggtg 9240
354 tgtcaagacc cctgcaatac atatgagacc ctgactgagt actggcgag cacagagtat 9300
356 ggtgtgggct actcctgtga cgcgggtctg cacggctggt accgg 9345

```

359 <210> SEQ ID NO: 2

360 <211> LENGTH: 297

361 <212> TYPE: DNA

362 <213> ORGANISM: Goat Uromodulin

364 <400> SEQUENCE: 2

```

365 tactggcgca gcacagagta cggctccggc tacgtctgtg atgtcagttt gggcggtctg 60
367 taccgcttcg tgggccaggg cggcgtgcgc ctgcccagaa cctgcgtgcc cgtcctgcac 120
369 tgaacacagg ccgcgcctat gtggctcaac ggcacgcacc catcgagcga cgagggcatc 180
371 gtgaaccgag tggcctgtgc gcactggagc ggcactgctt gcctgtggga cgcgcctgtc 240

```

RAW SEQUENCE LISTING

DATE: 11/12/2001

PATENT APPLICATION: US/09/605,042A

TIME: 15:40:48

Input Set : A:\es.txt

Output Set: N:\CRF3\11122001\I605042A.raw

```

373 caagtgaagg cctgtgccgg cggctactac gtgtacaacc tgacagagcc ccctgag      297
376 <210> SEQ ID NO: 3
377 <211> LENGTH: 653
378 <212> TYPE: DNA
379 <213> ORGANISM: Goat Uromodulin
381 <220> FEATURE:
382 <221> NAME/KEY: misc_feature
383 <222> LOCATION: (605)..(605)
384 <223> OTHER INFORMATION: n is unknown.
387 <220> FEATURE:
388 <221> NAME/KEY: misc_feature
389 <222> LOCATION: (609)..(609)
390 <223> OTHER INFORMATION: n is unknown.
393 <220> FEATURE:
394 <221> NAME/KEY: misc_feature
395 <222> LOCATION: (612)..(612)
396 <223> OTHER INFORMATION: n is unknown.
399 <400> SEQUENCE: 3
400 actatagggc acgcgtggtc gacggcccg gctggtaaatt cttaaaaaaa aaaaaaaaca      60
402 aaaagaacat cactaagccc ccctgccctg gcactttatt ggaagggtcaa gaacacactc      120
404 aaccacacaa gagatgtgaa catacctgtg tggtaaccaa agacatcccc ttacacacat      180
406 acatgaccct tccattgggt tgcacattgc tgtagcttt ttgttgagga agggagctag      240
408 acacctctac acaaccccc aactggagttc tctggaacag agtaaatacc atcgtgtcat      300
410 catggagcgc acacacactg tggctctgca acctcgattt gtgtcctggc tctgtgtctt      360
412 accaatgaag caagtagctt aaaccttctg aatctcaagt ttcttcaccc tcaaactata      420
414 gctaaataca aaagtcattt cccagggcca ctggagagga ttctatcaga taatggatag      480
416 aagatgccta tcccagtgtt tgacatatcc taagtgtta atacacgaga gctcaccatc      540
418 ttactggta ttaattgcaca gagaaacaca caaagtgtca gtgcccctgc taggtagaga      600
WV-> 420 gggangcang gnaaggagat ctgagcaaaa ggcatagaat atatcaagct ggg      653
423 <210> SEQ ID NO: 4
424 <211> LENGTH: 655
425 <212> TYPE: DNA
426 <213> ORGANISM: Goat Uromodulin
428 <220> FEATURE:
429 <221> NAME/KEY: misc_feature
430 <222> LOCATION: (42)..(42)
431 <223> OTHER INFORMATION: n is unknown..
434 <220> FEATURE:
435 <221> NAME/KEY: misc_feature
436 <222> LOCATION: (58)..(58)
437 <223> OTHER INFORMATION: n is unknown.
440 <220> FEATURE:
441 <221> NAME/KEY: misc_feature
442 <222> LOCATION: (85)..(85)
443 <223> OTHER INFORMATION: n is unknown.
446 <400> SEQUENCE: 4
WV-> 447 cgggggaagg tttattttgt ttcttttcaa aggggggtctt gntctgtctc aaagaccnta      60
WV-> 449 aggaccatga aaaaatctct ttgtnaaaag tgccaagcgg tccccactct gaatctgggc      120
451 ttttctgctt gcagaaagct gctctgaatg tcacgccaat gccacttgta cgggtggacgg      180

```

VERIFICATION SUMMARY

DATE: 11/12/2001

PATENT APPLICATION: US/09/605,042A

TIME: 15:40:49

Input Set : A:\es.txt

Output Set: N:\CRF3\11122001\I605042A.raw

L:106 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:304 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:420 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:447 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:449 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4